

## **ABSTRACT**

The field of the invention is that of devices for detecting objects concealed on human subjects. These devices are more particularly dedicated to the surveillance and protection of airport areas and transport airplanes. Currently, the devices rely either on X-ray detection or on microwave imaging. In the former case, the system can prove hazardous to human beings, and in the other case, the device raises ethical problems. The invention proposes a device whose operation relies on the reflective properties of the microwave signals polarized by the suspect objects that we are seeking to detect. This device can be portable or installed on security gates. This technique is simple to design, inexpensive, does not require any great computing power and is very well suited to the objects to be detected. The complete measurement is extremely quick and requires no sophisticated measuring instrument.